

REMARKS

Claims 1, 3, and 27 were previously pending in this application. Claims 1, 3, and 27 have been amended. Specifically, claims 1 and 27 have been amended to recite a first sensor positioned on at least one of the first and the second material supply lines. This amendment is supported throughout the specification, for example, at page 6, lines 14-16. Claim 2 had been previously canceled; accordingly, the dependency of claim 3 has been amended. New claims 37-39 have been added. As a result claims 1, 3, 27, 37-39 are pending for with claims 1 and 27 being independent claims.

New claims 37 and 38 are directed to a second valve and second sensor, and depend from independent claims 1 and 27, respectively. These claims are supported throughout the specification, for example, at page 18, line 20, through page 19, line 2. New claim 39 is directed to a method of regulating the supply of the first and the second process materials to provide a constant volume of flow exiting the static mixer, and is supported throughout the specification, for example, at page 20, lines 31-33. No matter has been added.

Rejection under 35 U.S.C. §112

Claim 3 was rejected under 35 U.S.C. §112, second paragraph, as being indefinite. Claim 3 has been amended to depend from claim 1, as suggested by the Examiner, to overcome this rejection. Accordingly, withdrawal of the rejection is respectfully requested.

Rejections Under 35 U.S.C. §102

Claims 1 and 27 were rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 3,266,780 to Waters (hereinafter Waters).

Waters fails to disclose or teach a sensor positioned on at least one of the first and second material supply lines as recited in amended claims 1 and 27. Waters discloses a sensing head down stream of a mixer, so that the product-mix is thoroughly blended before being analyzed by refractometer 31 to ensure that the refractometer is not "misled" by transient and localized concentrations of one liquid or the other. (Waters, column 4, lines 16-20.) By positioning the sensor head downstream of the mixer, Waters may not prevent the production of a mixture

outside of an acceptable mixing range because the sensor is signaling a correction is needed only after the liquids are mixed to form the product.

In contrast to Waters, the present invention as recited in claims 1 and 27 has a first sensor positioned on at least one of the first and the second material supply lines. This is not disclosed in Waters. This feature of the present invention reduces or eliminates the production of waste material by verifying that the process materials are acceptable for blending before they are delivered to the static mixer. As such, the invention as recited in claims 1 and 27 is novel in view of Waters. Accordingly, withdrawal of this rejection is respectfully requested.

Rejections Under 35 U.S.C. §102(b)/103

Claims 3 was rejected under 35 U.S.C. §102(b) as being anticipated by Waters or, in the alternative, under 35 U.S.C. §103(a) as being unpatentable over Waters.

Claim 3 depends from amended independent claim 1. As noted above, claim 1 is novel in view of Waters, and claim 3 necessarily includes all of the features of claim 1. Moreover, one skilled in the art would not have been motivated to position the sensing head upstream of the mixer in Waters. Waters discloses that the product-mix is thoroughly blended before being analyzed by refractometer so that the refractometer is not "mislead" by transient and localized concentrations of one liquid or another. (Waters, column 4, lines 16-20.) One skilled in the art would not have been motivated to position a first sensor on at least one of the first and second material supply lines because Waters teaches that this may mislead the sensor by signaling an over reaction to variations in concentrations of one liquid or another. Therefore, Waters fails to disclose, teach, or suggest each and every element of claim 3 as it depends from claim 1. Accordingly, withdrawal of these rejections is respectfully requested.

Rejection Under 35 U.S.C. §103

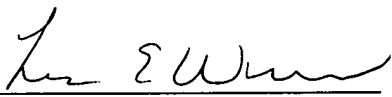
Claim 3 was rejected under 35 U.S.C. §103(a) as being unpatentable over Waters in view of U.S. Patent No. 4,835,456 to Liu (hereinafter Liu), U.S. Patent No. 4,146,422 to Prough (hereinafter Prough) and U.S. Patent No. 2,964,994 to Witt (hereinafter Witt).

As noted above, Waters fails to disclose, teach, or suggest, a sensor positioned on at least one of a first and second material supply lines as recited in claim 3 (as it depends from amended claim 1). Liu, Prough, and Witt each disclose a sensor that may detect flow material characteristics, but fail to cure the deficiency of Waters with respect to claim 3 as noted above, namely, positioning a first sensor on at least one of the first and the second material supply lines. As such, claim 3 (as it depends from claim 1) is patentable over the cited references, either alone, or in combination. Withdrawal of this rejection is, therefore, respectfully requested.

CONCLUSION

In view of the foregoing amendments and remarks, this application is now in condition for allowance. A notice to this effect is respectfully requested. If the Examiner believes, after this amendment, that the application is not in condition for allowance, the Examiner is requested to call the Applicants' attorney at the telephone number listed below.

Respectfully submitted,
Jeffrey Alexander Wilmer et al., Applicants

By: 
Lisa E. Winsor, Reg. No. 44,405
LOWRIE, LANDO & ANASTASI, LLP
Riverfront Office Park
One Main Street
Cambridge, MA 02142
(617) 395-7000

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